

Amendments to the Specification:

Please replace the 3rd full paragraph of page 8 with the following rewritten paragraph:

As used herein, the terms "molecular recognition element" or "MRE" are intended to include the component of the Modular Molecular Clasp that is capable of binding to a ligand. The MRE may be a single moiety, e.g., a polypeptide or protein domain, or it may include two or more moieties, e.g., a pair of polypeptides such as a pair of single chain antibody domains. The MRE may be derived from a naturally occurring protein or polypeptide; it may be designed de novo, or it may be selected from a library. For example, the MRE may be or derived from an antibody, a single chain antibody (scFv), a single domain antibody (VHH), a lipocalin, a single chain MHC molecule, an AnticalinTM ANTICALINTM (engineered protein with antibody-like binding functions derived from natural lipocalins as a scaffold, Pieris), an AffibodyTM AFFIBODYTM (highly specific affinity proteins that mimic monoclonal antibodies, and can be designed to bind to any desired target protein, Affibody), or a TrineectinTM TRINECTINTM (engineered protein consists of a scaffold adapted from fibronectin, and with extremely high binding specificity and affinity for target proteins, Phyllos). In a preferred embodiment, the MRE is a single chain antibody.

Please replace the 2nd paragraph of page 11 with the following rewritten paragraph:

The MRE can be naturally occurring or may be non-naturally occurring or mutated from its naturally occurring DNA or protein sequence. Preferred MRE superfamilies include, but are not limited to, single chain antibodies (scFv), single domain antibodies (VHH), an AnticalinTM ANTICALINTM (Pieris), a lipocalin, an AffibodyTM AFFIBODYTM (Affibody), a TrineectinTM TRINECTINTM (Phyllos), single chain T cell receptors, and single chain MHC molecules. In a preferred embodiment, the MRE is a single chain antibody. In that embodiment, the MRE comprises at least one single chain antibody VH chain (or a portion thereof) or at least one VL chain (or portion thereof) specific for a ligand of interest. In a preferred embodiment, the MRE comprises at least a portion of a VH and a portion of a VL chain that recognizes and binds to a ligand of interest and a transducer is disposed between the VH and VL chains.

Please replace the 1st full paragraph of page 25 with the following rewritten paragraph:

Methods for modeling and designing the Modular Molecular Clasps of the present invention are described in U.S. Patent Application ~~Serial No. —~~ Serial No. 09/996,249, entitled “Methods and Systems for Designing Machines Including Biologically Derived Parts” by Chan J. *et al* filed on November 28, 2001, the entire contents of which are incorporated herein by reference.